Return on Investment
Emergency Management Database Software Development

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Standards, Initiatives or Statutes:

Code of Iowa - House File 2205: Relating to Electronic Commerce by Establishing Requirements for Electronic Transactions and Electronic Records, Relating to Sales and Use Tax Exemption for Access to Electronic Commerce.

Code of Iowa Chapters 29, 29A, 29B, 29C and 35A: Emergency Management Division Mission: To support, coordinate, and maintain state and local emergency management activities in order to establish sustainable communities and assure economic opportunities for Iowa and its citizens.

Federal Code includes:

Preparedness – Section 201.(a) The President is authorized to establish a program of disaster preparedness that utilizes services of all appropriate agencies and includes –
        Preparation of disaster preparedness plans for mitigation, warning, emergency
                operations, rehabilitation, and recovery.
        Training and exercises.
        Post disaster critiques and evaluations.
        Annual review of programs.
        Coordination of Federal, State and Local preparedness programs.
        Application of Science and Technology.
        Research.

Mitigation – Section 404. The President may contribute up to 75 percent of the cost of hazard mitigation measures which the President has determined are cost-effective and which substantially reduce the risk of future damage, hardship, loss or suffering in any area affected by a major disaster. Such measures shall be identified following the evaluation of natural hazards under section 409 and shall be subject to approval by the President. The total of contributions under this section for a major disaster shall not exceed 15 percent of the estimated aggregate amounts of grants to be made under Section 406 with respect to such major disaster.

Response – Section 403. In general, agencies may on the direction of the Governor, provide assistance essential to meeting immediate threats to life and property resulting from a major disaster. Response includes: Federal resources, Local resources, equipment, medicine, food, and other consumables. Work and services to save lives and protect property.

Recovery – Section 406 (a) – Contributions can be made to a State or Local government for the repair, restoration, reconstruction, or replacement of a public facility damaged or destroyed by a major disaster and for associated expenses incurred by such government.

Provision of Temporary Housing – Section 408 (a) Provide, by purchase or lease, temporary housing, suitable rental housing, mobile homes, or other readily fabricated dwelling to persons who, as a result of a major disaster, require temporary housing.

Database Development Requested:

The Emergency Management Division needs to have a relational database developed to include the following:

- Automation of on-line processing of county disaster assistance forms.
- Online requests to interface with the current accounting database in order to pay disaster claims.
- EMAC – Emergency Management Assistance Compact.
- Online authorization forms.
- Modifications to Situation Report format
- Online submittal of county expenses for reimbursement.

The following databases are currently in use, but are not relational and need to be integrated into the development of the new database.

- Mitigation Database
- Public Assistance Database
- Planning and Training Databases
- Master List Database

Benefits to Iowa Citizens and State Government:

The above database and web development would provide Internet access and online assistance to citizens of the State of Iowa. Using the Internet access, disaster assistance forms would be available at the public's convenience. Also, administrative forms would be processed in a timely manner. Citizens would receive reimbursements with increased efficiency and improved service. EMD personnel would be able to provide a tracking method for all forms of reimbursement at all levels of the assistance process. Online forms would provide a paperless environment where EMD employees could access the latest information per recipient.   Currently, citizens of the State of Iowa must find a disaster field office to fill out the required forms for financial assistance. Internet access would allow citizens to obtain the forms online or submit them electronically at their convenience.

EMD personnel would be able to provide improved service to the citizens of the State of Iowa. This database would enhance their methods of tracking services rendered and provide enhanced services in the future.

SECTION 2: PROJECT PLAN

Agency Information

Project Executive Sponsor: Ellen M. Gordon, the Administrator of the Emergency Management Division (EMD), sponsors the EMD Database and Web Development project. Ms. Gordon will provide adequate workspace, hardware, software and required office equipment to perform the services indicated above. Ms. Gordon will also insure the implementation and completion of the project within EMD.

Organization skills: Since programming skills are limited within the EMD, a skilled database programmer must be hired to accomplish the project.

Project Information

In order to meet the electronic commerce guidelines of HF 2205 and provide improved services to the Citizens of Iowa, web development of online forms and improved relational database services are imperative.

Expectations: Easy online access for disaster assistance; access to database services to EMD personnel from anywhere in the State of Iowa; improved processing of claims for reimbursement; and improved data processing for disaster assistance.

Measures: Improved data access, online services and forms will be invaluable to the citizens during a time of stress and in need of government assistance.   If the project fails, we will not be able to provide the improved services that the public needs and wants from State government.

Environment: Counties, EMD employees, and State of Iowa citizens will provide input. Training is always provided to emergency response personnel.

Project Management and Risk Mitigation: The project will be under the direction of John Pommer, Information Technology Specialist 5. The bidding process will be used to procure the necessary database software recommended by the consultant hired. The budget has been identified on the attached pages.

Security / Data Integrity / Data Accuracy / Information Privacy: Certain aspects of the data stored will be of a confidential nature, including social security numbers, etc. The remaining data is public record. The data will be stored on a Windows 2000 server, which is a very secure operating system with encrypted passwords and other security features. The server itself is housed in a locked room located within the STARC Armory in Johnston, Iowa.

Current Technology Environment:

Software:

Client: Windows 2000, NT 4.0, Windows 95
                    Microsoft Office 97, 98 and 2000

Servers: Windows 2000, and NT 4.0, Unix
                    Rumba interface – WallData
                    IBM/PC3270 mainframe emulation

Hardware:

Client: Compaq Deskpro's
                    Dell
                    Armada Laptops
                    Gateway
                    AST
                    Rose

Server: Compaq 8000
                    Compaq 3000
                    Compaq ML530
                    Compaq 5000

Proposed Environment:

Software:

The consultant will determine the database software needed to achieve project goal.

Hardware:

The consultant will determine if additional storage is needed to enhance existing servers. (Operating System – Windows 2000)

The consultant must determine web access requirements, i.e., firewall, security, etc.

The connectivity and bandwidth have been recently enhanced with new network components, i.e., router, switches, and fiber.

Data Elements:

The consultant will conduct interviews with EMD Bureau Chiefs and staff to determine the data elements needed to accomplish each emergency assistance task. The data elements will also be dependent on the platform selected. The consultant must review the existing databases to include elements needed and data to be transferred to new system.

Project Schedule:

Consultant Research – 2 weeks
Database Planning – 2 weeks
Web Development Planning – 2 weeks
Procurement of Software – 6 weeks
Database Development – 6 months – 1 year
Web Development – 2 to 6 months

SECTION 3: PROJECT BUDGET/ROI INVESTMENT FINANCIAL ANALYSIS

Estimated Costs:

Provided by Professional Services:

Personnel	$ 0.00
Software:	$ 20,000.00
Hardware:	$ 5,000.00
Training:	$ 2,000.00
Facilities:	$ 0.00
Professional Svcs	$137,000.00
Supplies:	$ 1,000.00
Total	**$165,000.00**

Project must include new development and enhancements after the system is in place. Modifications will include further programmer services.

Project Funding:

State Funds:

$165,000.00 = 100% of total cost

Estimated project cost by fiscal year:

$165,000.00 for SFY 2002 = 100% of total cost

How much of the cost would be incurred by your agency from normal operating budgets (staff, equipment, etc.) ?

$0.00 = 0%

How much of the cost would be paid by requested State IT project funds?

$165,000.00 = 100%

Identify, list and quantify all annual maintenance expenses (State share) related to the project.

Maintenance, further modifications and enhancements related to this project must be included in this project for following years. These estimates total approximately $30,000.00 per year

Pre-Project Costs, Post-Project Costs, and State Government Benefit

Not applicable to this project

Annual Benefit summary

Citizen Benefit:

Approximately $250,000 would be saved by Iowa's citizens due to this project. This would be derived from reduced costs associated with travel, postage, long distance telephone charges, and work time lost related to the processing of claims and forms associated with State emergencies and disasters.

Total Annual Project Benefit:

$250,000.00

Total Annual Project Cost:

$30,000.00

Benefit / Cost Ratio:

$250,000.00/$30,000.00 = 8.33

Return on Investment:

$250,000.00-$30,000.00/$165,000.00 = 1.33